

Headquarters U.S. Air Force

Integrity - Service - Excellence

USAF CBRNE Response



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**Emergency Services Branch
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DSN 332-4416

U.S. AIR FORCE

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Mission Statement

Providing lighter, leaner, capability-based engineer forces that are rapidly deployable to support Air and Space operations in peacetime and across the full spectrum of conflict,

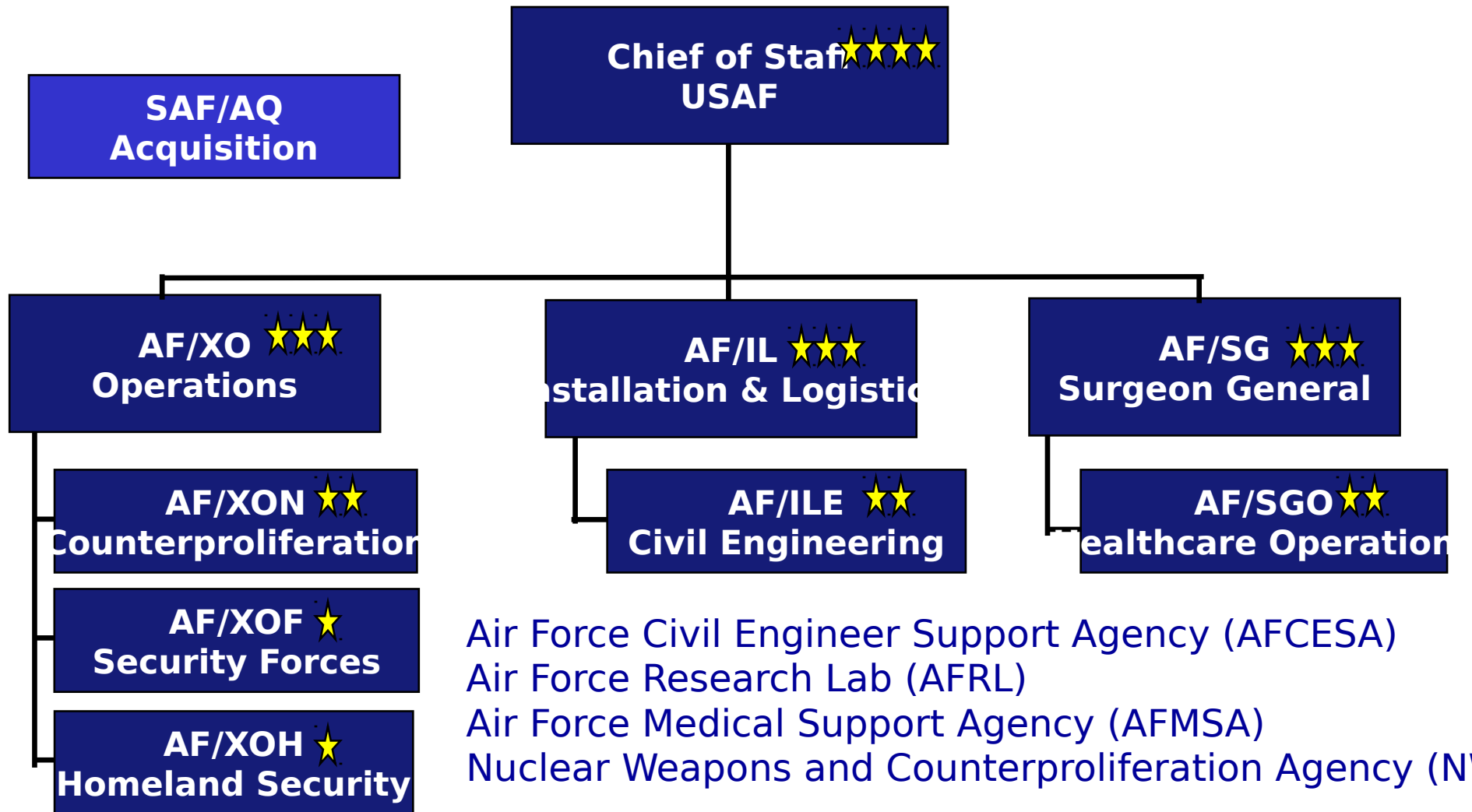
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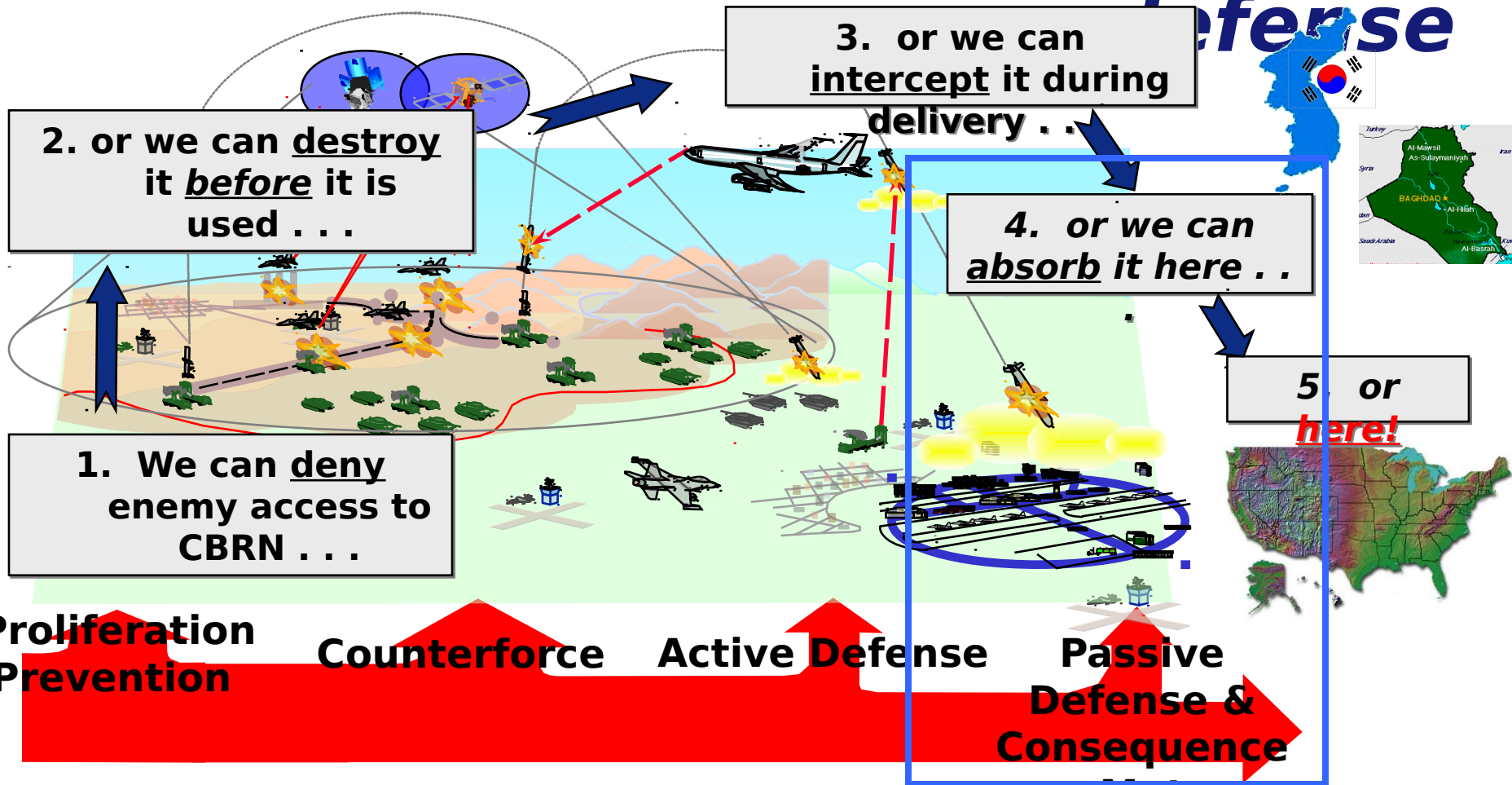
Key Players on Air Staff





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Counter-NBC Operations ...requires offense and defense

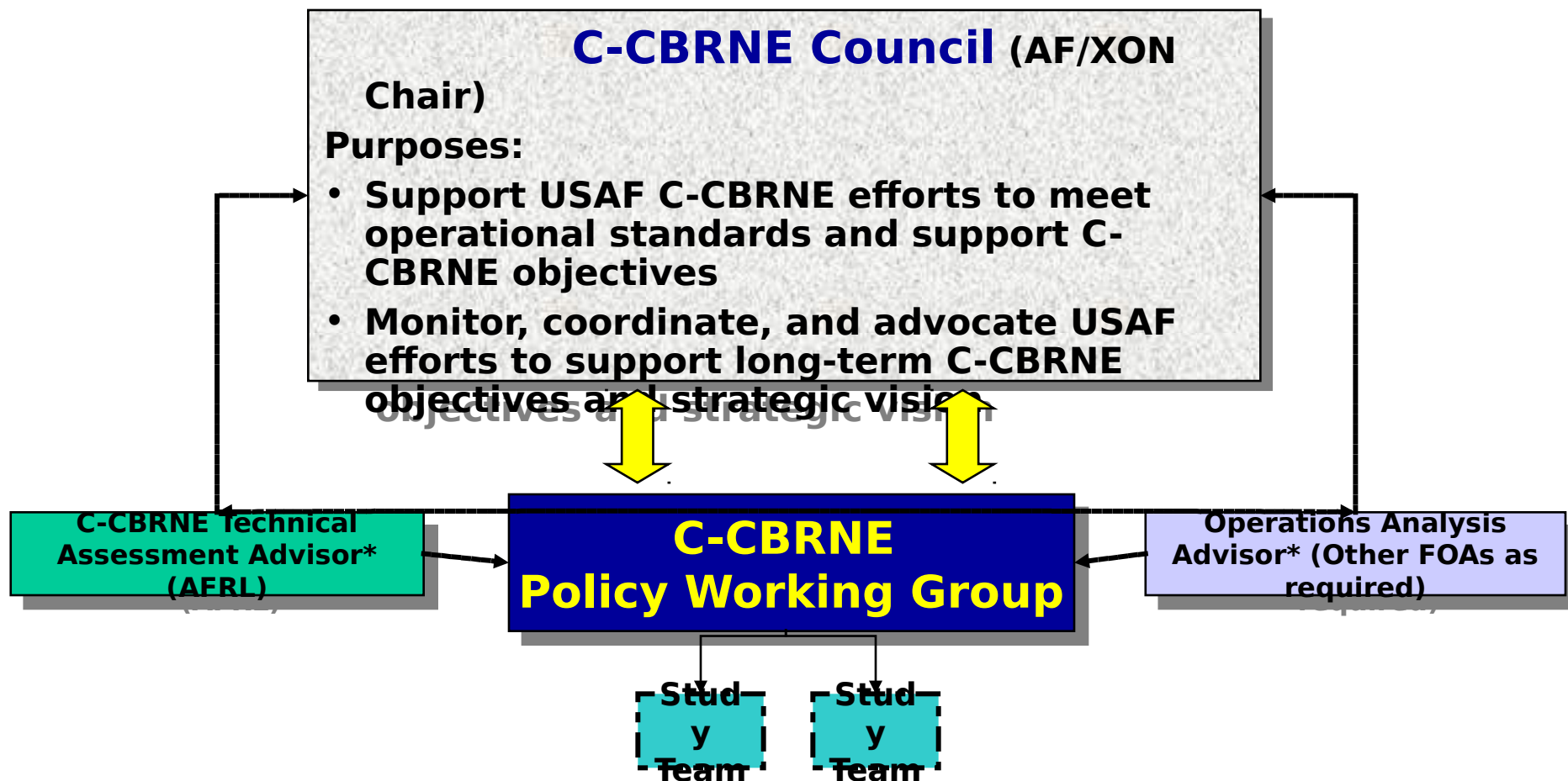


Must strike a balance to successfully operate across entire spectrum



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USAF C-CBRNE Council



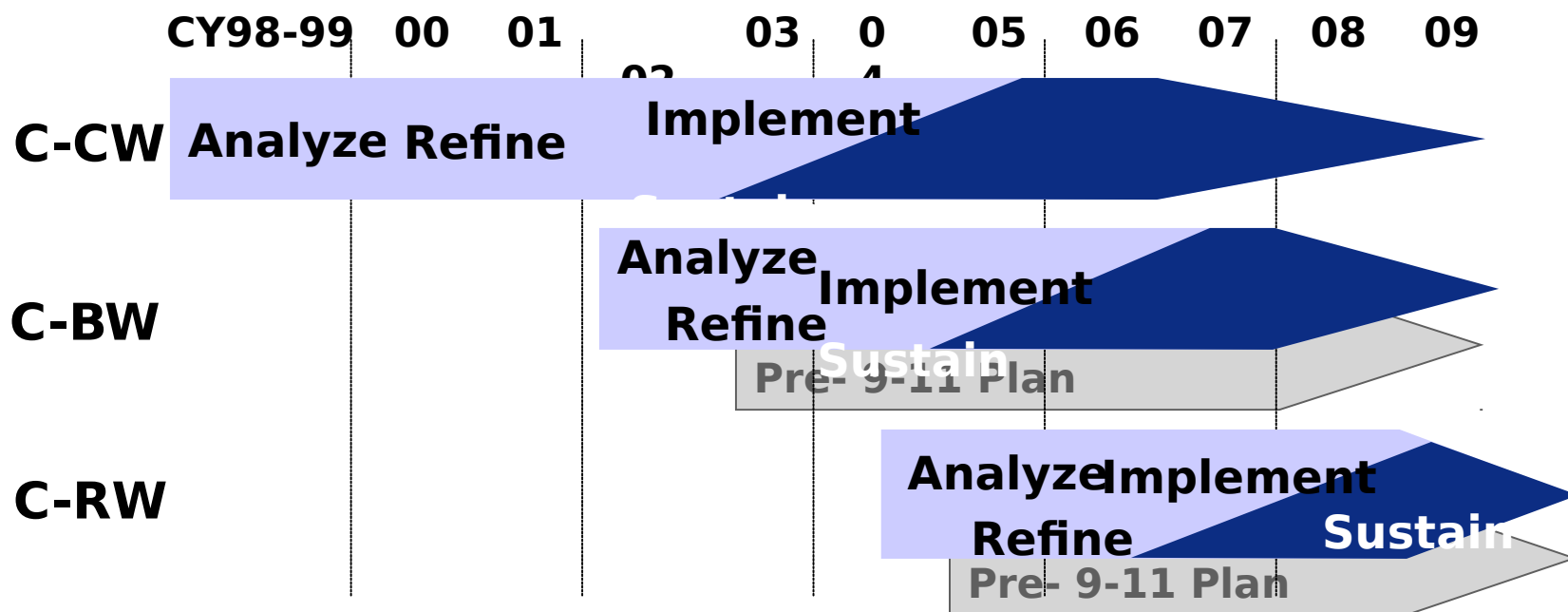
Provides single USAF voice on C-CBRNE issues



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What Is The USAF Plan? ...C-CBRNE CONOPS

- Vision: “Own the CBRN Environment”
- 9-11 delayed C-CW CONOPS and accelerated C-BW efforts
- Focus areas:
 - 1) Maximize warfighting capability
 - 2) Posture to Win new Homeland Front on War on Terrorism





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C-CBRNE CONOPS ...New C-CW Elements



**Better
Understanding of
the Hazard
Environment**



**Command and Control with Risk
Management Tools**



**More Sophisticated
Procedures**



**Contamination Avoidance:
Protection of Key Assets**

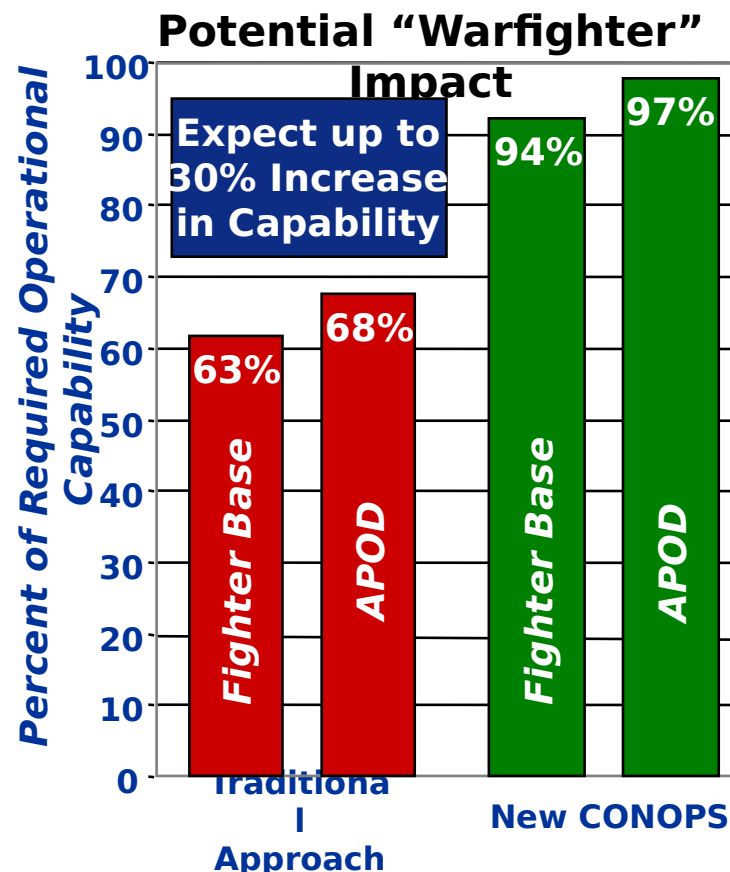


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C-CBRNE CONOPS

...C-CW Element Payoff

- Focused re-look at the chemical problem
 - Discounted a lot of self-defeating myths
- Worked the science
 - Still some gaps to resolve but understand enough to move forward
- **New C-CW CONOPS**, developed with PACAF's lead, **works**
 - Thoroughly tested at 51FW, Osan AB
- Confident we now know how to **recover significant combat** power we historically expected to lose
 - Represents **at least 250 combat**



* Based on USAF operations only --
Included degradation due to CW effects only

C-CW works -- provides significant increase in combat capability --

CONOPS changes alone

- Excellence

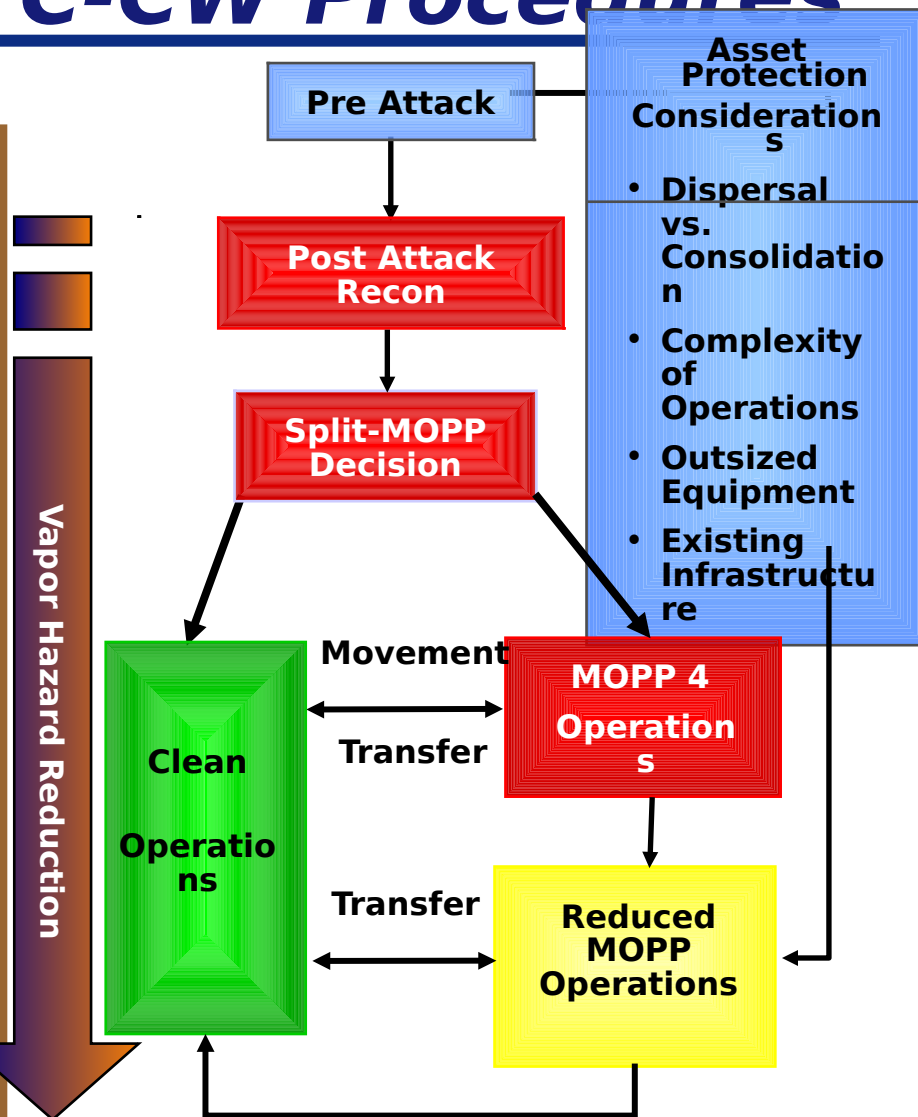


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C-CBRNE CONOPS

...New C-CW Procedures

- SCUD inaccuracy limits ability to achieve full base contamination
 - Post attack recon to determine clean and contaminated areas
 - Split MOPP - MOPP 4 in contaminated zone only
- Leverage understanding that liquid agents rapidly sorb into porous operating surfaces
 - Check surfaces to determine if liquid remaining on contaminated surfaces
 - Reduce MOPP after vapor hazard dissipates
- Sustain MOPP 4 operations with contaminated equipment
 - Operations within 10 ft. of bare and painted metal surfaces will require MOPP 4 protection for longer periods





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C-CBRNE CONOPS ***...C-BW Element***



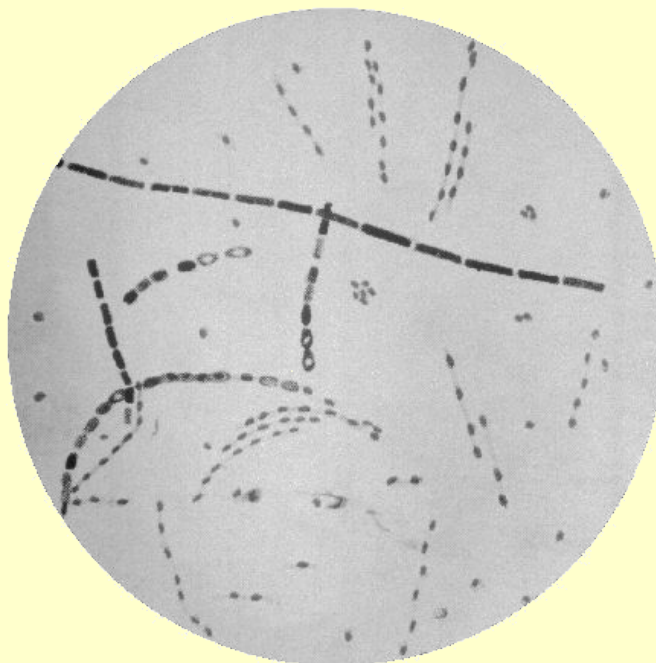
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Biological Defense Task Force

Interim Bio-Defense Plan

24 February 2003

Biological Defense Task Force
Headquarters, United States Air Force



Anthrax



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Biological Defense Task Force

Status Report to the Chief of Staff of the Air Force

14 February 2003

Biological Defense Task Force
Headquarters, United States Air Force

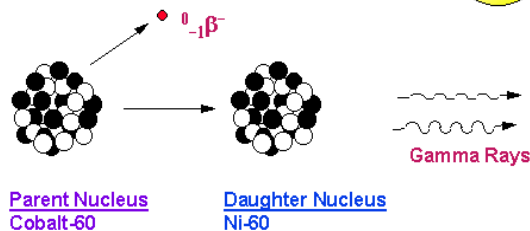


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C-CBRNE CONOPS ...C-RW Element



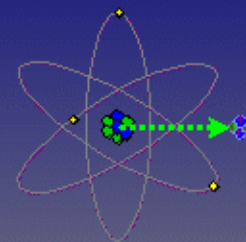
Gamma-Ray Radiation



α

Alpha radiation characteristics

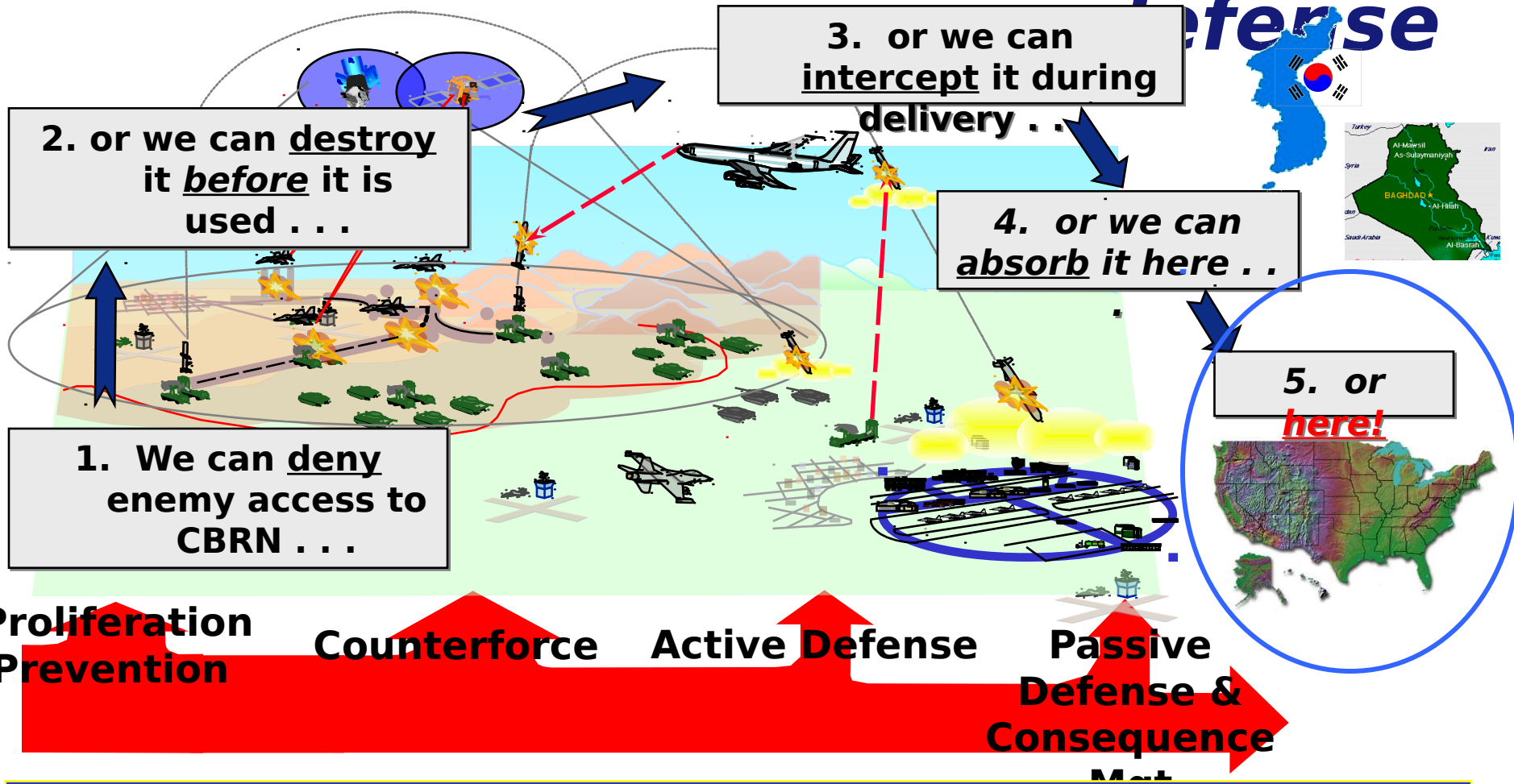
- ▶ Production
 - ▷ Large Nucleus > 82
- ▶ Large Particle
 - ▷ 4 amu
- ▶ + 2 charge
- ▶ Low Penetration
 - ▷ stopped by paper
- ▶ High Energy 3-5 MeV





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Counter-NBC Operations ...requires offense and defense



Must strike a balance to successfully operate across entire spectrum



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Full Spectrum Threat Response (FSTR) Program

Natural Disaster (War & Peace)

Hurricane
Typhoon
Tornado
Earthquake
Volcano
Flood
Tsunami
Severe Weather

NBCC Attack (Wartime)

Chemical
Biological
Radiological
Nuclear
Explosive

Response May Be
On-Base or Off-base

Major Accident (War & Peace)

Aircraft Crash
Ground Incidents
Hazardous Material

Terrorist WMD Attack (Peace)

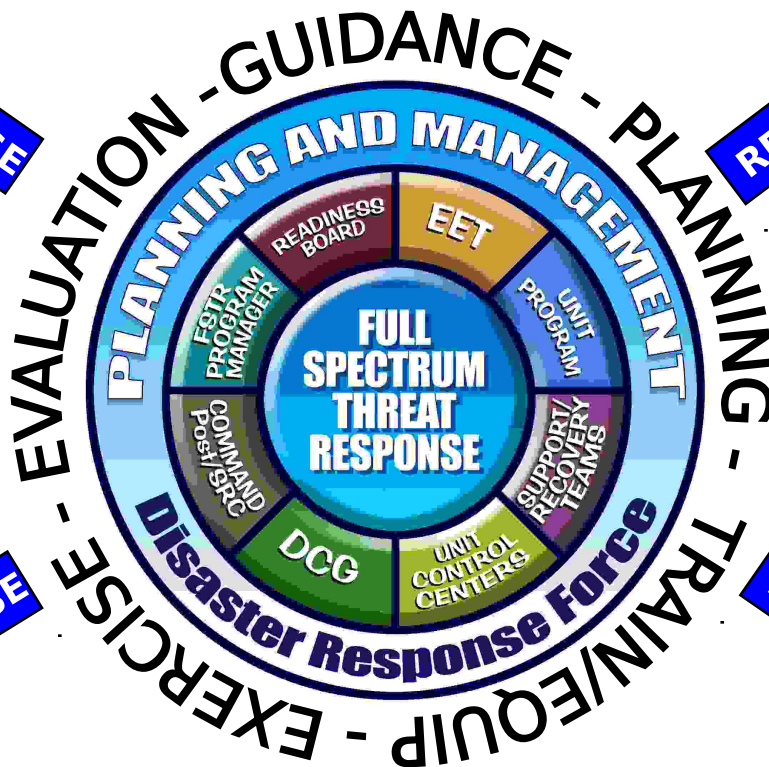
Chemical
Biological
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Nuclear
Explosive

RESPONSE

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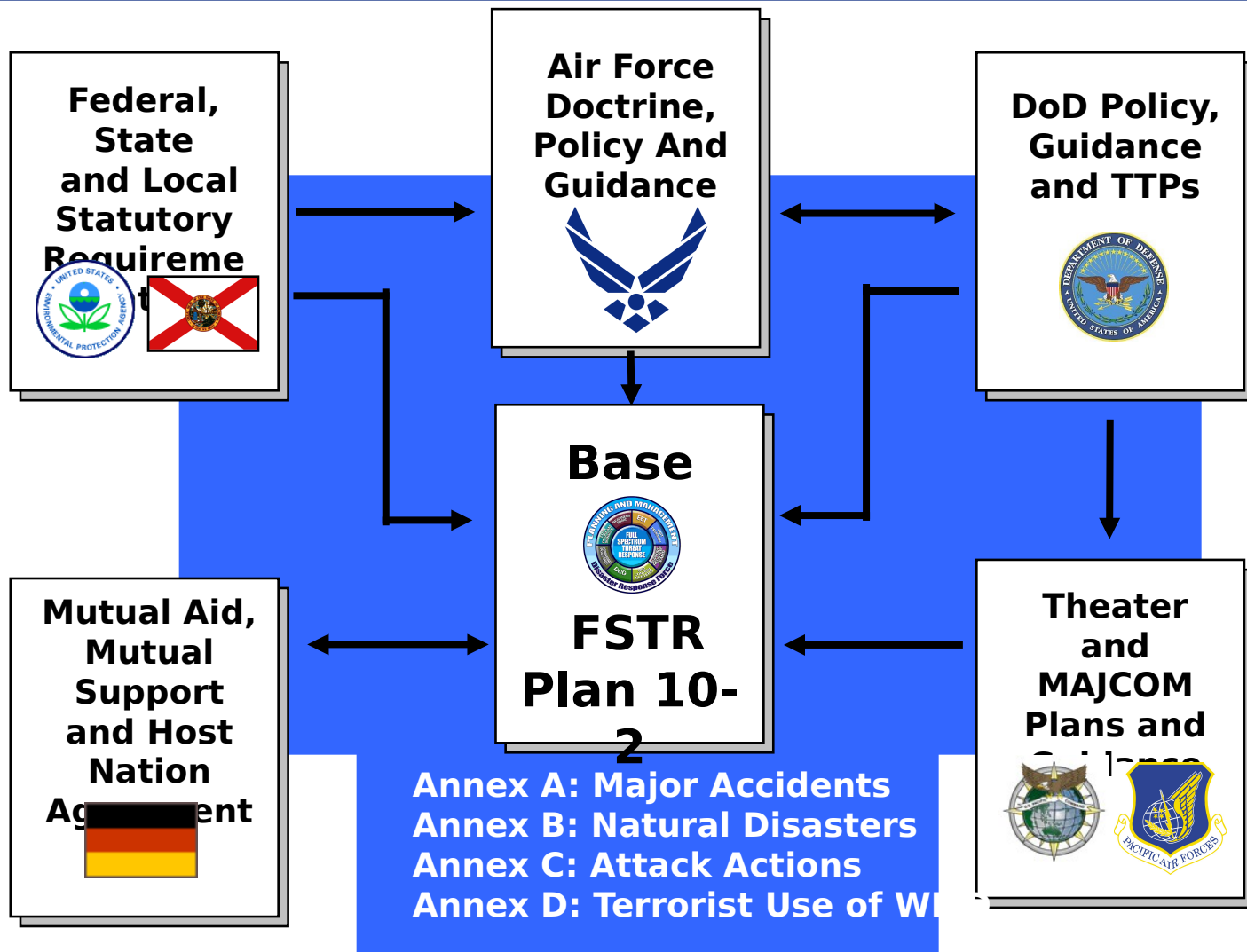


CE Readiness is the commander's focal point for a single, integrated, full spectrum threat response program



FSTR Plan Integration

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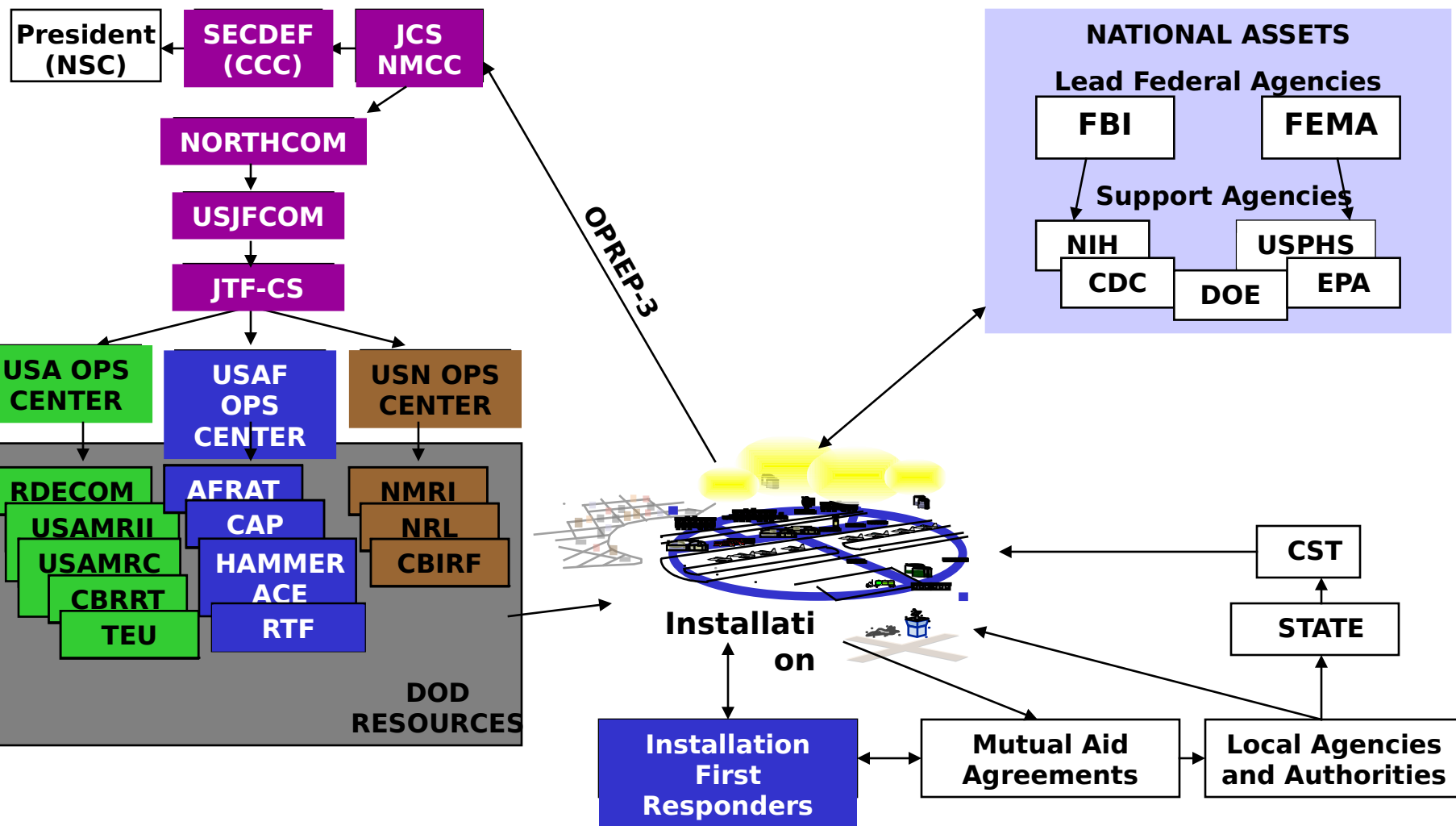


Annex A: Major Accidents
Annex B: Natural Disasters
Annex C: Attack Actions
Annex D: Terrorist Use of Weapons



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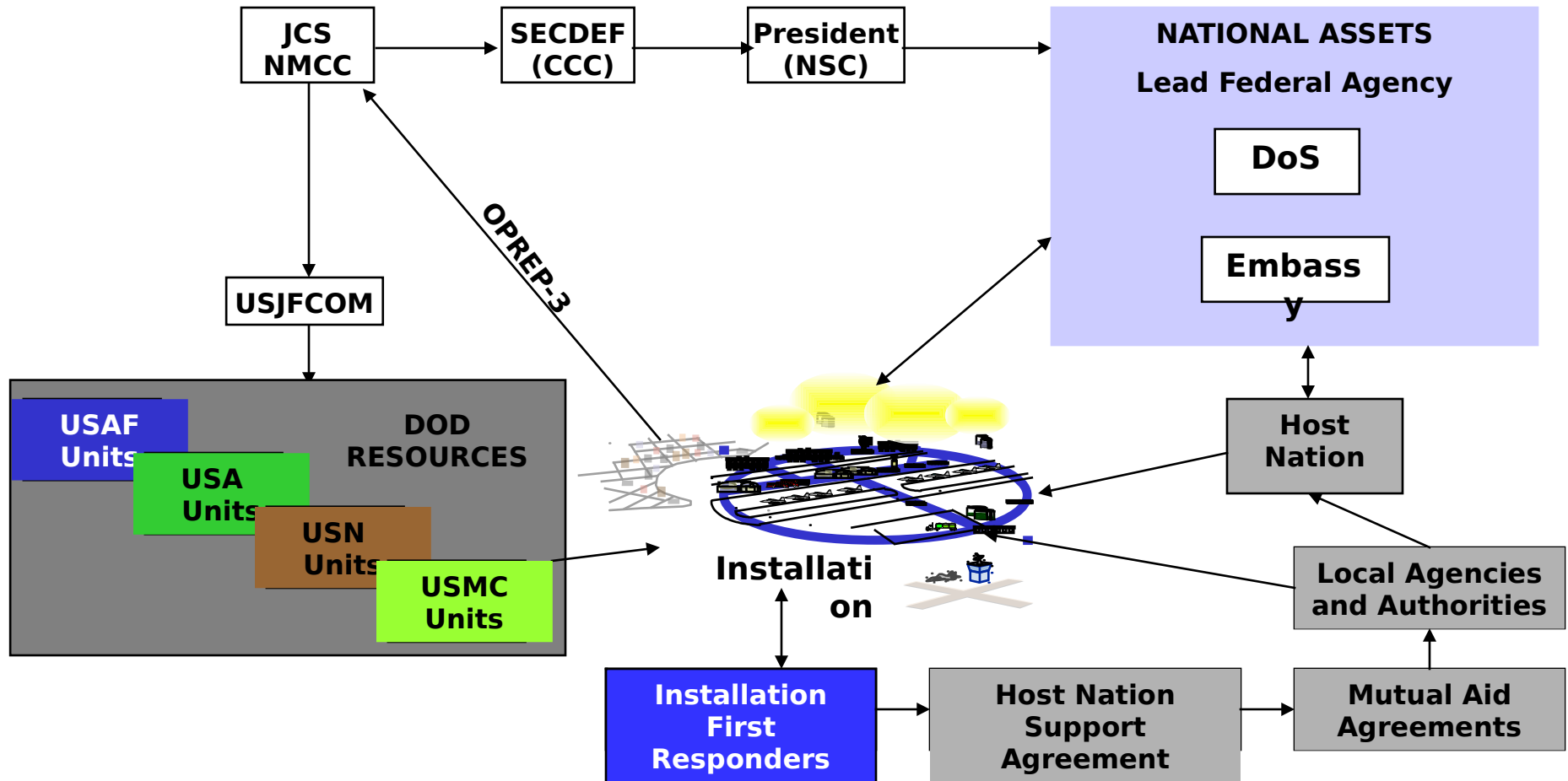
Air Force Response Structure (CONUS)





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Air Force Response Structure (OCONUS)





Command Elements

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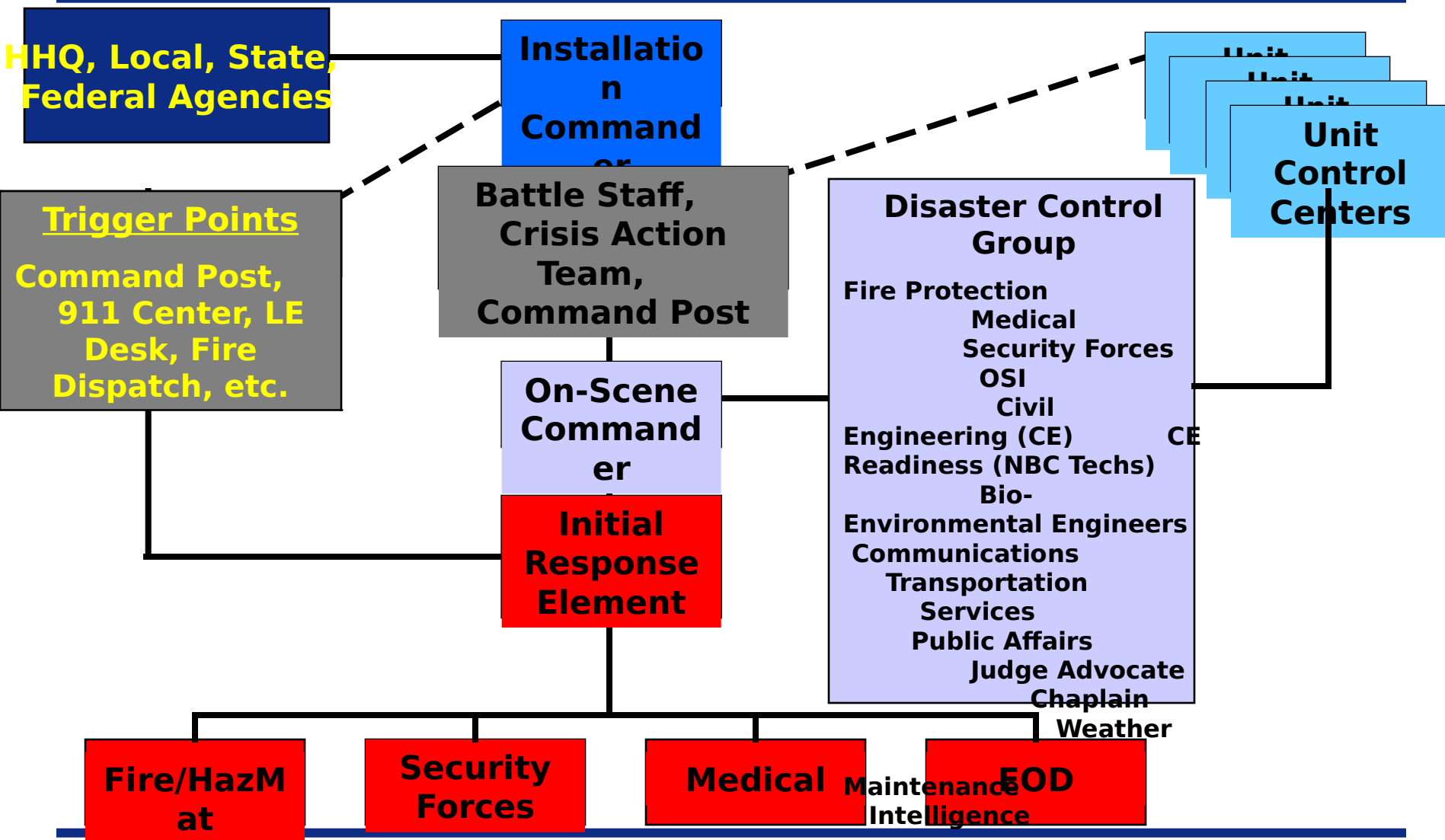
- **Trigger Points (24/7)**
 - **Command Post, 911 Center, LE Desk, Fire Dispatch, etc**
- **Battle Staff / Crisis Action Team**
 - **Wing/Group Commanders**
 - **Supports DCG and coordinates with “outside” agencies**
 - **Equivalent to Emergency Operations Center (EOC)**
 - **Called “Survival Recovery Center” in wartime setting**
- **Disaster Control Group (DCG)**
 - **Led by On-Scene Commander (OSC) - Typically MSG/CC**
 - **Directs incident response efforts**
 - **Provides on-scene support at large/complicated incidents**
- **Modeled after Incident Command System**

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Installation Response Force

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Initial Response Element

- **Fire Department**
 - **HAZMAT Teams (May include NBC specialists and/or Bioenvironmental Engineers)**
- **Security Forces**
- **Emergency Medical Units**
- **Ambulance**





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Specialized AF CBRNE Resources

AFRAT

CAP

HAMMER ACE

Response Task Force



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Air Force Radiological Assessment Team

- **Rapid global response to radiation accidents or incidents**
- **Provides on-site health physics, bioenvironmental engineering, and occupational medicine support to the on-scene commander**





Civil Air Patrol (CAP)

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- **CAP is an auxiliary of the USAF**
 - **USAF assign missions**
- **Missions include light airlift, aerial damage assessment, air/ground search and rescue, and disaster relief**
- **CAP units often have sophisticated comm gear, including live video feeds**





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Hammer Adaptive Communications Element (Hammer ACE)

- **Air Force's special-purpose, quick-reaction Comm unit**
- **Supports emergency and disaster response forces and nuclear incident response**
- **Can deploy a three-person team worldwide within three hours of**



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Response Task Force (RTF)

- **Designated lead federal agency for response to and recovery from DoD nuclear weapon/material accidents.**

- **Manned, equipped and able to coordinate all actions required to control and recover**



- **Investigating role in**

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Transforming CBRN Installation Protection



Integrated Base
Defense



Full Spectrum
Threat
Response Plan

10-2

**INSTALLATION
PROTECTION**

JSIPP

SAF WMD Emergency Response Pgm

**Guardian
Project**

- PDM-1 (99) + PBD 289 (02) + PDM 1 (03)
- DepSecDef 5 Sep 03 Memo

GeoBase





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Questions?





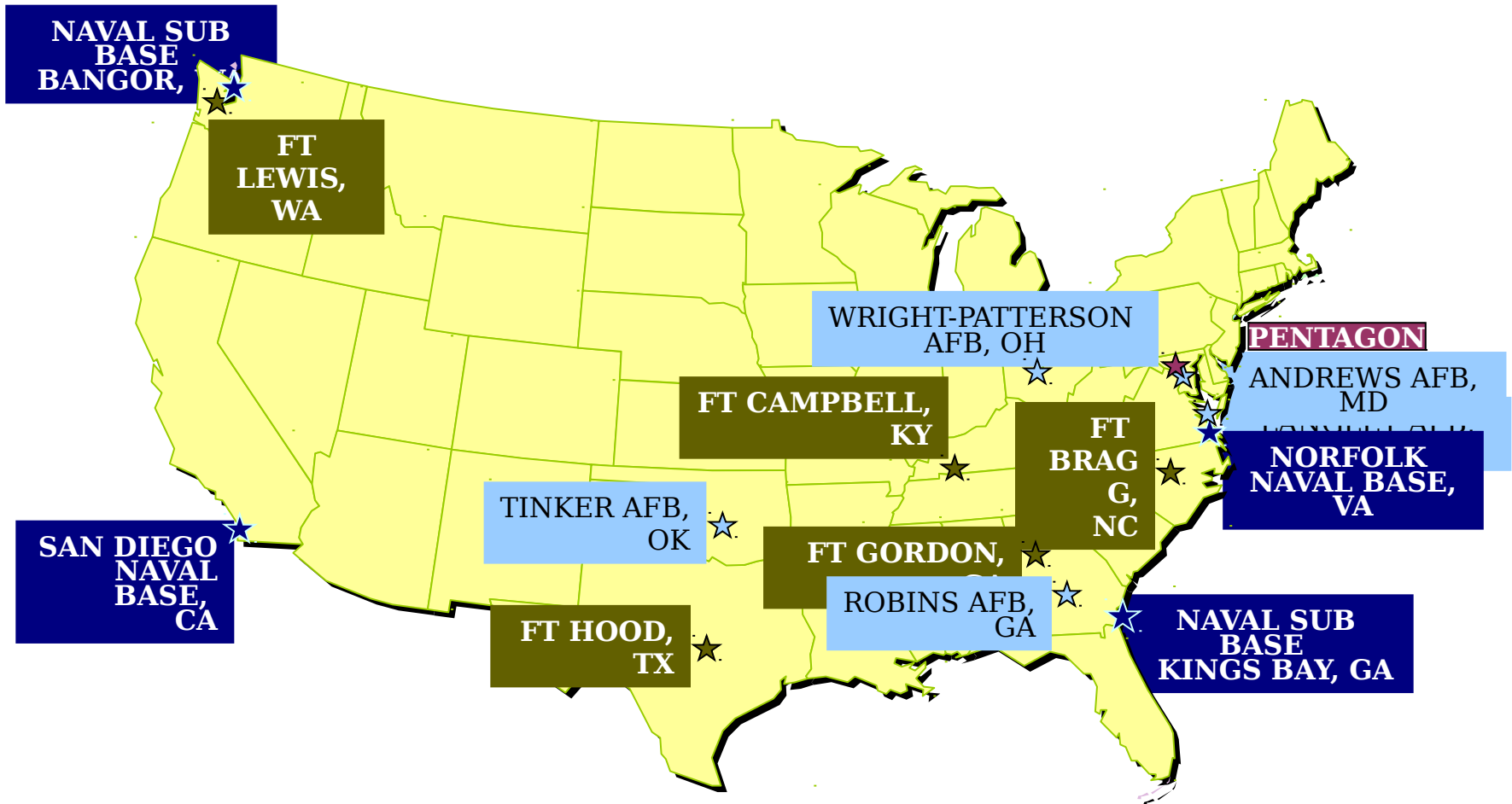
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Back up Slides

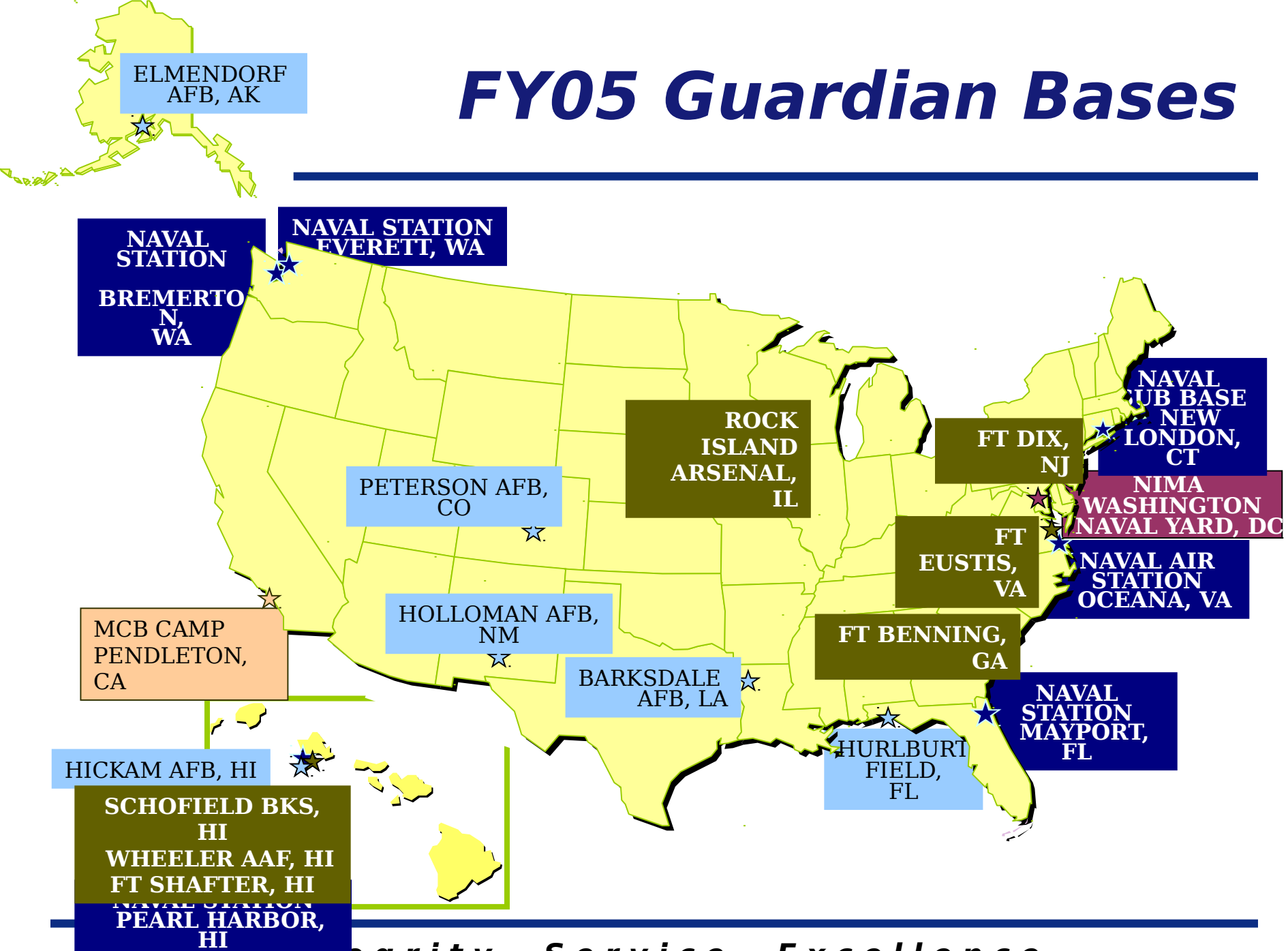


FY04 Guardian Bases

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FY05 Guardian Bases





CBRN Installation Protection

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WMD Emergency Response (ER)

- FY99 PDM-1 directed WMD-unique equipment, training & base-wide exercises
- Partnered w/ Texas A&M

Joint Service Installation Pilot Project

- OSD sponsored “pilot project” designed to determine how best to protect bases from CBRN threat
- Chem/Bio Sensors at 6 of 9 DoD Installations
- ER equip, training & exercises

Guardian Project

- \$120M for equip/training so far
- PDM-1 directed highest level CBRN protection at 200 DoD installations over the FYDP (FY04-FY09)
- Working with JRO and JPEO to determine equipment and training requirements

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AF WMD Training & Exercise Program

- **Initiated via Program Decision Memorandum 1, Aug 99**
 - **Equips and trains AF first responders (fire, security forces, medical, explosive ordnance disposal and CE readiness) for peace time/terrorist CBRN incident response**
 - **Cross functional Air Staff membership**
 - **Leverage existing installation HAZMAT response and Disaster Control Group (DCG) infrastructure**



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AF WMD Training and Exercise Program

- **Training established to focus on base First Responder capability in conjunction with local/state/federal agencies**
 - **First visit provides installation capability assessment and Exercise Evaluation Team training**
 - **Second visit provides emergency responder training and Table Top a**





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Follow-On Elements Available to DCG

- **Medical Treatment Teams**
 - **Damage Control**
 - **NBC Specialists**
 - **Legal**
 - **Bioenvironmental Engineers**
 - **Search and Recovery**
 - **Decontamination Teams**
 - **Communications**
 - **Health Risk Assessment**
 - **EOD**
 - **Civil Engineers (public works)**
 - **Environmental Mgt**
 - **Others as required**
 - **Public Affairs**
-



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Disaster Control Group (DCG)

- **Led by On-Scene Commander (OSC) - Mission Support Group CC or alternate (MSG/CD, CES/CC)**
- **Provides on-scene support at large/complex and incidents**
- **Coordinates and directs base resources**
- **Provides functional expertise and unit coordination**
- **The Incident Management System used by civilian responders**

